

## **AMENDMENTS TO THE CLAIMS**

**This listing of claims will replace all prior versions and listings of claims in the application:**

### **LISTING OF CLAIMS:**

1. *(Currently Amended)* A communication method for a communication network comprising a core network, a buffering element, a line termination element and a plurality of network termination elements, said buffering element coupled to said line termination element via said core network, and said line termination element coupled to each of said network termination elements over a shared medium separate from said core network, wherein said communication method comprises interacting between said buffering element and said line termination element to adjust a cell input/output rate of said buffering element to at least one bandwidth related condition of each of said network termination elements, wherein said line termination element notifies said buffering element to adjust said cell input/output rate of said buffering element to said at least one bandwidth related condition of said network termination elements.

2. *(Cancelled)*.

3. *(Currently Amended)* A communication method for a communication network comprising a core network, a buffering element, a line termination element and a plurality of network termination elements, said buffering element coupled to said line termination element

via said core network, and said line termination element coupled to each of said network termination elements over a shared medium separate from said core network, wherein said communication method comprises interacting between said buffering element and said line termination element to adjust a cell input/output rate of said buffering element to at least one bandwidth related condition of each of said network termination elements, wherein said buffering element notifies said line termination element to adjust said at least one bandwidth related condition of said network termination elements to said cell input/output rate of said buffering element.

4. (*Currently Amended*) A buffering element to be used in a communication network, said communications network comprising a core network, a line termination element and a plurality of network termination elements, said buffering element being coupled to said line termination element via said core network, and said line termination element being coupled to each of said network termination elements over a shared medium separate from said core network, said buffering element comprises:

a buffering part adapted to store cells sent to said buffering element;

a measuring part coupled with an input to an output of said buffering part and adapted to determine a criterion based on a cell input/output rate of said buffering part;

an interpreting part coupled with an input to an output of said measuring part and adapted to interpret said criterion based on said cell input/output rate of said buffering part and being adapted to derive therefrom an instruction for a policing part whether or not to discard or mark said cells sent to said buffering element,

a policing part coupled with an input to an output of said interpreting part and adapted to discard or mark said cells sent to said buffering element, based on said instruction of said interpreting part, wherein said buffering element further comprises:

a reception part coupled with an output to an input of said interpreting part and adapted to receive a notification of said line termination containing an interpretation of at least one condition of each of said network termination elements, and that said interpreting part is adapted to derive said instruction from said notification of said line termination on said interpretation of said at least one condition of each of said network termination elements.

5. *(Previously Presented)* The buffering element according to claim 4, wherein said criterion is a characteristic of cells sent to said buffering element.

6. *(Previously Presented)* The buffering element according to claim 4, wherein said criterion is a filling level of said buffering part.

7. *(Currently Amended)* A line termination element to be used in a communication network, said communication network comprising a core network, a buffering element and a plurality of network termination elements, said buffering element being coupled to said line termination element via said core network, and said line termination element being coupled to each of said network termination elements over a shared medium separate from said core network, said line termination element comprising:

a detection part adapted to detect at least one condition of each of said network termination elements; and

a condition interpreting part coupled with an input to an output of said detection part and adapted to derive an interpretation of said at least one condition of each of said network termination elements, wherein said line termination element further comprises:

a notification part coupled with an input to an output of said condition interpreting part and adapted to notify said buffering element of said interpretation of said at least one condition of each of said network termination elements.

8. *(Previously Presented)* The line termination element according to claim 7, wherein said condition interpreting part is adapted to derive a bandwidth allocation for each of said network termination elements based on said at least one condition of each of said network termination elements.

9. *(Previously Presented)* The line termination element according to claim 7, wherein said condition interpreting part is adapted to transparently pass said at least one condition of each of said network termination elements.

10. *(Currently Amended)* A buffering element to be used in a communication network, said communications network comprising a core network, a line termination element and a plurality of network termination elements, said line termination element adapted to allocate bandwidth to each of said network termination elements, said buffering element coupled to said

line termination element via said core network, and said line termination element coupled to each of said network termination elements over a shared medium separate from said core network, said buffering element comprising:

a buffering part adapted to store cells sent to said buffering element;

a measuring part coupled with an input to an output of said buffering part and adapted to determine a criterion based on a cell input/output rate of said buffering part; and

an interpreting part coupled with an input to an output of said a measuring part and adapted to generate an interpretation of said criterion based on said cell input/output rate of said buffering part, wherein said buffering element further comprises:

a notification part coupled with an input to an output of said interpreting part and adapted to notify said line termination of said interpretation of said criterion based on said cell input/output rate of said buffering part.

11. *(Previously Presented)* The buffering element according to claim 10, wherein said criterion is a characteristic of cells sent to said buffering element.

12. *(Previously Presented)* The buffering element according to claim 10, wherein that said criterion is a cell filling level of said buffering part.

13. *(Previously Presented)* A line termination element to be used in a communication network, said communication network comprising a buffering element and a plurality of network termination elements, said line termination element being adapted to allocate bandwidth to each

of said network termination elements, said buffering element being coupled to said line termination element, and said line termination element being coupled to each of said network termination elements over a shared medium, said line termination element comprising:

a medium access control part adapted to allocate bandwidth to each of said network termination elements based on at least one condition of each of said each network termination element;

a detection part coupled with an output to an input of said a medium access control part and adapted to detect said at least one conditions of each of said network termination elements; and

a granting part coupled with an input to an output of said a medium access control part and adapted to send grants to each of said network terminations indicating that a certain amount of bandwidth is allocated to each of said network terminations, wherein said line termination element further comprises:

a reception part coupled with an output to an input of said a medium access control part and adapted to receive a notification of an interpretation of a criterion based on a cell input/output rate of said buffering part, and that said medium access control part is adapted to allocate said bandwidth to each of said each network termination elements based on said notification of said buffering element.

14. (*Previously Presented*) The line termination element according to claim 13, wherein said criterion is a characteristic of cells sent to said buffering element.

15. (*Previously Presented*) The line termination element according to claim 13, wherein said criterion is a filling level of a buffering part of said buffering element.

16. (*New*) The communication method according to claim 1, wherein said adjustment to said cell input/output rate of said buffering element in response to said notifying is without impact on a rate of transmission between said line termination element and said network termination elements.

17. (*New*) The buffering element according to claim 4, wherein said adjustment to said cell input/output rate of said buffering element in response to said notifying is without impact on a rate of transmission between said line termination element and said network termination elements.

18. (*New*) The line termination element according to claim 7, wherein said adjustment to said cell input/output rate of said buffering element in response to said notifying is without impact on a rate of transmission between said line termination element and said network termination elements.

20. (*New*) A communication method for a communication network comprising a core network, a buffering element, a line termination element and a plurality of network termination elements, said buffering element coupled to said line termination element via said core network, and said line termination element coupled to each of said network termination elements over a

shared medium separate from said core network, wherein said communication method comprises interacting between said buffering element and said line termination element to adjust a cell input/output rate of said buffering element to at least one bandwidth related condition of each of said network termination elements.